

machine to automatically adjust any of the synchronized variables to match adjustments of the variables in the first machine in real time or substantially real time. Thus, this may be advantageous where an operator of a first combine is particularly skilled at operating the combine and sets the machine variables for optimal operation and can share the machine variables and settings with other machines.

[0036] Although the invention has been described with reference to the one or more embodiments illustrated in the figures, it is understood that equivalents may be employed and substitutions made herein without departing from the scope of the invention as recited in the claims.

Having thus described one or more embodiments of the invention, what is claimed as new and desired to be protected by Letters Patent includes the following:

1. A system for performing an agricultural process, the system comprising a plurality of agricultural machines, wherein each agricultural machine is engaged in performing an aspect of the agricultural process, and each agricultural machine is in electronic communication with every other agricultural machine in the system using a standardized communication and control protocol such that the plurality of agricultural machines form a networked group, and wherein performance of the aspect of the agricultural process by each agricultural machine is substantially synchronized with performances of the aspects of the agricultural process by the other agricultural machines in the networked group based on information electronically communicated by each agricultural machine.

2. The system as set forth in claim 1, wherein the plurality of agricultural machines includes—

- a first machine having a hardwired network connection;
- a second machine having both a hardwired network connection to at least one first machine in the networked group and a wireless network connection to at least one other second machine in the networked group; and
- a third machine having a wireless network connection to at least one second machine in the networked group.

3. The system as set forth in claim 2, wherein the first machine is an unmanned agricultural implement.

4. The system as set forth in claim 2, wherein the second machine is a manned agricultural tractor connected via the hardwired network connection to the first machine.

5. The system as set forth in claim 1, wherein substantial synchronization of performances of the aspects of the agricultural process by the plurality of agricultural machines is achieved substantially automatically.

6. The system as set forth in claim 1, wherein the information is selected from the group consisting of: geographic position, relative position, wayline position, speed, load level, and fill level.

7. The system as set forth in claim 1, wherein the system further includes one or more sensors engaged in performing a sensor aspect of the agricultural process, and each sensor being in electronic communication with the agricultural machines in the system using the standardized communication and control protocol such that the one or more sensors are part of the networked group.

8. The system as set forth in claim 7, wherein the system further includes a station engaged in performing a station aspect of the agricultural process, and the station being in electronic communication with the sensors and the agricul-

tural machines in the system using the standardized communication and control protocol such that the station is part of the networked group.

9. The system as set forth in claim 1, wherein the standardized communication and control protocol is an ISO 11783 Compliant Implement Control standard.

10. The system as set forth in claim 9, wherein an ISO 11783 Virtual Terminal standard is used to create virtual terminals to facilitate providing output to and receiving input from an operator of the second machine and an operator of the third machine.

11. The system as set forth in claim 10, wherein the second machine has a computer area network bus, and wherein an ISO 11783 Task Controller standard is used to remotely inject an Object Pool for the virtual terminal into the computer area network bus.

12. The system as set forth in claim 11, wherein an ISO 25119 Machine Directive standard is used to facilitate communication between and control of the first, second, and third machines.

13. The system as set forth in claim 1, wherein the second machine includes a gateway device configured to extend the networked group to additional machines provided with wireless network connections.

14. A system for performing an agricultural process, the system comprising:

- a plurality of agricultural machines, with each agricultural machine engaged in performing an aspect of the agricultural process, and each agricultural machine is in electronic communication with every other agricultural machine in the system using a standardized communication and control protocol such that the plurality of agricultural machines form a networked group, and wherein performance of the aspect of the agricultural process by each agricultural machine is substantially automatically synchronized with performances of the aspects of the agricultural process by the other agricultural machines in the networked group based on information electronically communicated by each agricultural machine, wherein the information is selected from the group consisting of: geographic position, relative position, wayline position, speed, load level, and fill level, the plurality of agricultural machines including—
- a first machine which is an unmanned agricultural implement and has a hardwired network connection,
- a second machine which is a manned tractor and has a hardwired network connection to at least one first machine in the networked group, a wireless network connection to at least one other second machine in the networked group, and a gateway device configured to extend the networked group to additional agricultural machines provided with wireless network connections, and
- a third machine which is a manned truck and has a wireless network connection to at least one second machine in the networked group, and a gateway device configured to extend the networked group to additional agricultural machines provided with wireless network connections.

15. The system as set forth in claim 14, wherein—
the standardized communication and control protocol is an ISO 11783 Compliant Implement Control standard;
an ISO 11783 Virtual Terminal standard is used to create virtual terminals to facilitate providing output to and